

WASTE TREATMENT LAGOON

PRACTICE INTRODUCTION

USDA, Natural Resources Conservation Service—Practice Code 359



WASTE TREATMENT LAGOON

A waste treatment lagoon is an impoundment made by excavation or earth fill to provide storage for biological treatment of animal or other agriculture waste.

PRACTICE INFORMATION

The purpose of this practice is to store and biologically treat organic waste, reduce pollution, and protect water quality.

The three general types of waste treatment lagoons are:

- Anaerobic—require less surface area than naturally aerobic lagoons, but may give off offensive odors
- Naturally aerobic—require more surface area, but are relatively odor free
- Mechanically aerated—comparable in size to anaerobic lagoons, but require energy for aeration

Waste treatment lagoons are located as near the source of waste as possible but as far from human dwellings as possible. The location should also be where prevailing winds will carry odors away from residences and public areas.

To improve efficiency and reduce sludge buildup, solids should be removed from the waste before it enters the lagoon. A solids trap or separator should be installed between the waste source and the lagoon.

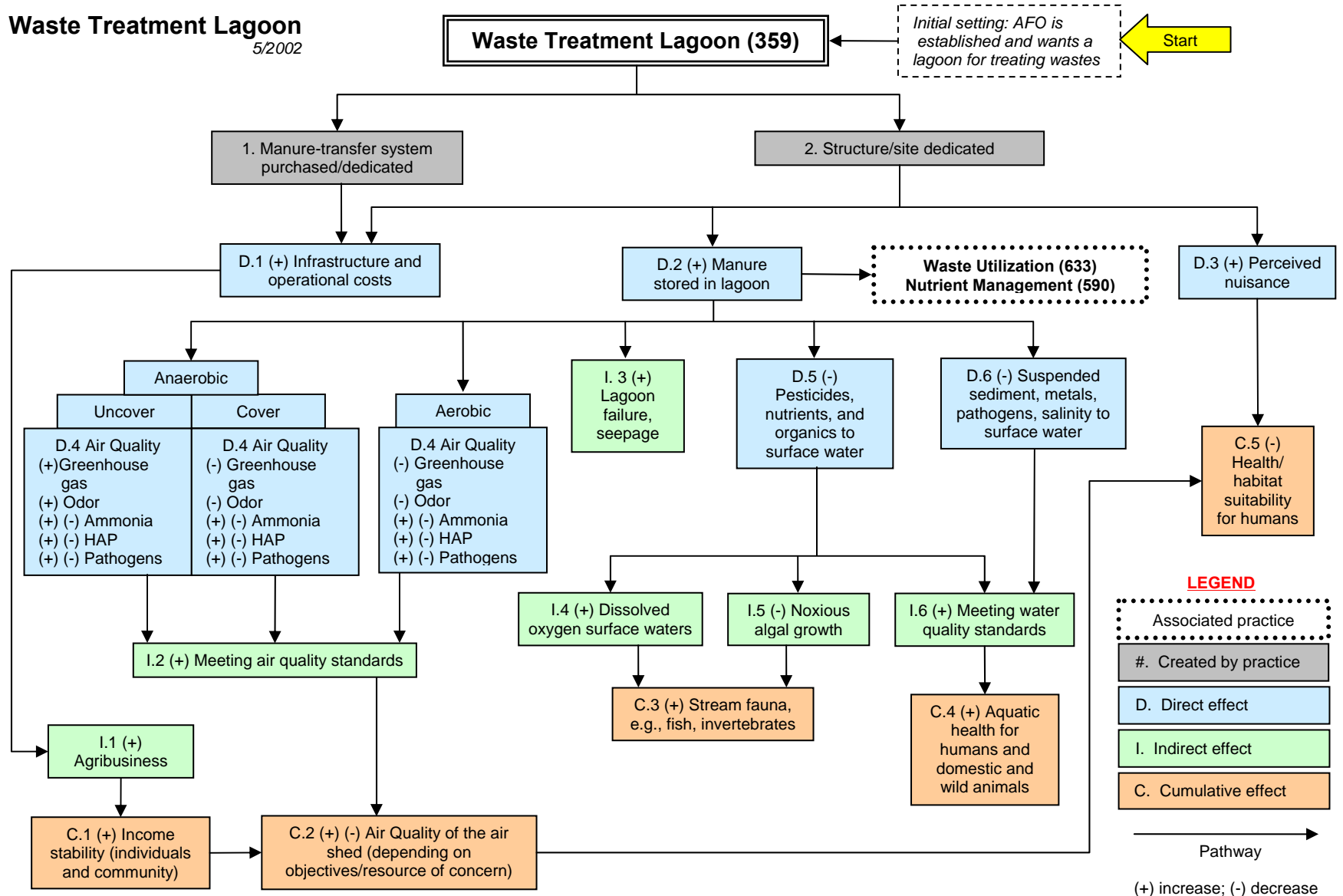
COMMON ASSOCIATED PRACTICES

Waste Treatment Lagoon is commonly used in a Conservation Management System with practices such as Solid/Liquid Waste Separation Facility (632), Waste Utilization (6330, and Nutrient Management (590).

For further information, refer to the practice standard in the local Field Office Technical Guide and associated specifications and job sheets.

The following page identifies the effects expected to occur when this practice is applied. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowners and are presumed to have been obtained. Users are cautioned that these effects are estimates that may or may not apply to a specific site.

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Note: Effects are qualified with a plus (+) or minus (-). These symbols indicate only an increase (+) or a decrease (-) in the effect upon the resource, not whether the effect is beneficial or adverse.

The diagram above identifies the effects expected to occur when this practice is applied according to NRCS practice standards and specifications. These effects are subjective and somewhat dependent on variables such as climate, terrain, soil, etc. All appropriate local, State, Tribal, and Federal permits and approvals are the responsibility of the landowners and are presumed to have been obtained. All income changes are partially dependent upon market fluctuations which are independent of the conservation practices. Users are cautioned that these effects are estimates that may or may not apply to a specific site.